ANSWERS: Crystal ball questions on Types of Solids

QUESTION: Name the...
i) type of solid
ii) type of particle present in the solid
iii) the bonding (attractive forces between particles)

	Type of solid	Type of **particle** present in the solid	The **bonding** (attractive forces between particles)
gold	metallic, 3D	cations in a sea of delocalised electrons	metallic bond
$(C_2H_4)n$ or polythene	molecular	molecules	strong covalent bond between atoms, weak intermolecular force between molecules
PCl_3	molecular	molecules	strong covalent bond between atoms, weak intermolecular force between molecules
silicon	molecular	molecules	strong covalent bond between atoms, weak intermolecular force between molecules
silica or silicon dioxide or SiO_2	covalent network, 3D	atoms	strong covalent bond between atoms
MgI_2	ionic, 3D	oppositely charged ions	ionic bond
ammonia	molecular	molecules	strong covalent bond between atoms, weak intermolecular force between molecules
P_4O_{10}	molecular	molecules	strong covalent bond between atoms, weak intermolecular force between molecules
carbon specifically graphite	covalent network, 3D	atoms	strong covalent bond between atoms
carbon specifically diamond	covalent network, 3D	atoms	strong covalent bond between atoms
$AgNO_3$	ionic, 3D	oppositely charged ions	ionic bond
Br_2	molecular	molecules	strong covalent bond between atoms, weak intermolecular force between molecules
chromium	metallic, 3D	cations in a sea of delocalised electrons	metallic bond
hydrochloric acid	molecular	molecules	strong covalent bond between atoms, weak intermolecular force between molecules
Cl_2O	molecular	molecules	strong covalent bond between atoms, weak intermolecular force between molecules
KCl	ionic, 3D	oppositely charged ions	ionic bond
candle wax	molecular	molecules	strong covalent bond between atoms, weak intermolecular force between molecules
nitrogen gas	molecular	molecules	strong covalent bond between atoms, weak intermolecular force between molecules
octane	molecular	molecules	strong covalent bond between atoms, weak intermolecular force between molecules